## Fiscal Year 2012 Apiary Inspection Report Illinois Department of Agriculture (July 1, 2011 through June 30, 2012)

The Illinois Department of Agriculture administers the Illinois Bees and Apiaries Act. Department Apiary Inspectors examine honeybee colonies around the state for the issuance of moving permits, to monitor the health of the bee population, to prevent the spread of diseases and pests of the honeybee and to provide advice on general honeybee management.

Beekeeping in Illinois continues to be a hobbyist endeavor with slightly more than 86% of the beekeepers managing 10 colonies or less (Table 1). 17 beekeepers maintain 100 or more colonies in the state.

Beekeepers are required to register with the Department of Agriculture. As of the end of Fiscal Year 2012, 1,825 beekeepers were managing 21,231 colonies in 2,849 apiaries in Illinois (Table 2). The number of registered beekeepers has increased significantly as compared to the past year. 430 new beekeepers were registered during the fiscal year. The total number of registered beekeepers statewide has increased each year since 2002. Table 3 lists the number of colonies and apiaries registered in each county in Illinois. JoDaviess County had the highest number of colonies with 1,590. Iroquois County and Union County placed second and third, with 1,554 and 1,510 colonies, respectively.

Colony inspection statistics for Fiscal Year 2012 and several previous years are included in Table 4. From July 1, 2011, through June 30, 2012, 399 apiaries containing 2,807 colonies were visited. Of these colonies, 2,031 were actually opened and inspected. American Foulbrood Disease (AFB) was detected in 17 colonies, or .8% of the colonies actually opened. This shows an increase in the number of colonies infected with AFB as compared to 2011. In accordance with the Act, the diseased colonies were destroyed. There was a significant increase in the number of colonies infected with European Foulbrood and a slight decrease in Chalkbrood as compared to Fiscal Year 2011.

Varroa mites continue to be found throughout the state. Inspection reports during the fiscal year indicated a significant increase in varroa mite levels as compared to last year. This may be due in part to the randomness of inspections, the time of year inspections were made, environmental conditions and possible resistance to chemicals for varroa mite treatment.

Reports from around the state indicated colony losses following the winter were light in some areas and heavy in other areas. Also, interest in colonies for pollination continues to increase due to the lack of feral colonies and the realization of the importance of honeybee pollination.

Tracheal mites are not listed as a regulated parasite in the Bees and Apiaries Act and rules. However, examinations for tracheal mites can still be performed when requested. Tracheal mites were discovered in 2 colonies in conjunction with Department apiary inspections for Fiscal Year 2012, as determined by laboratory tests.

The small hive beetle (SHB) continues to be a problem in Illinois. Based upon the Department's inspections, the SHB has spread to a total of 48 counties in isolated locations. The Department continues to closely monitor the movement of the SHB across Illinois.

The USDA-Animal Plant Health Inspection Service (APHIS) invited the Department to participate in a national honeybee survey in Fiscal Year 2012. The survey was designed to document which bee diseases/pests of honeybees are and are not present in the U.S. The Department collected samples at 25 different apiaries across the State and the samples were processed by APHIS. APHIS also shared the results of the survey with the cooperating beekeepers and the Department. Aside from the typical

disease/pest problems normally encountered by beekeepers, some locations contained Israeli Acute Paralysis Virus, Black Queen Cell Virus and Acute Bee Paralysis Virus. No previously unknown pests or diseases of the honeybees were discovered as part of the survey. Thanks to all the beekeepers who granted permission for their colonies to be surveyed.

Colony Collapse Disorder (CCD) has affected many honeybee colonies across the United States. The Department continued to monitor colonies closely for CCD—like symptoms and investigates as appropriate. No apiary inspections performed by the Department in Fiscal Year 2012 revealed the presence of CCD. Federal research continues to determine the cause(s) of CCD. The CCD issue has greatly increased public awareness on the importance of honeybees to humankind.

The Department and the Illinois State Beekeepers Association continue to encourage active communication between beekeepers and licensed pesticide applicators to accomplish the reduction of honeybee exposure to various pesticides (herbicides, insecticides, fungicides, etc.). There have been some instances where honeybees have been exposed to these materials, at times with catastrophic impacts.

Licensed pesticide applicators can continue to gain contact and locational information related to Illinois beekeepers on the Department's website through the DriftWatch<sup>TM</sup> internet site. In addition, beekeepers can register their colonies on the DriftWatch site. The Department encourages pesticide applicators to contact beekeepers well in advance of an application to allow them to take needed steps to protect his or her honeybee colonies. This is a voluntary process that does not guarantee the complete elimination of potential pesticide exposures to honeybee colonies. However, if the pesticide user community and beekeepers work together, these potential exposures can be greatly reduced.

TABLE 1

Distribution of Beekeeper Size in Illinois as of July 1, 2012

Number of Colonies	Number of Beekeepers	Percentage of Beekeepers		
0	80	4.38		
1-5	1,217	66.68		
6-10	274	15.01		
11-20	129	7.07		
21-50	81	4.44		
51-100	26	1.42		
101-200	8	0.44		
201-300	3	0.16		
301-400	0	0		
401-500	2	0.11		
>500	4	0.22		
TOTAL	1,825	100.0*		

<sup>\*</sup> May not total 100% due to rounding.

TABLE 2

Illinois Beekeeper and Colony Statistics from 1988 through 2012 as of July 1 of each year.

Year	Number of Registered Beekeepers	Number of Apiaries	Number of Colonies	Colonies/ Beekeeper	Colonies/ Apiary
2012	1,825	2,849	21,231	11.6	7.5
2011	1,815	2,786	21,266	11.7	7.6
2010	1,631	2,565	20,547	12.6	8.0
2009	1,433	2,325	19,680	13.7	8.5
2008	1,366	2,303	19,556	14.3	8.5
2007	1,329	2,216	18,821	14.2	8.5
2006	1,264	2,157	20,217	16.0	9.4
2005	1,213	2,054	27,646	22.8	13.5
2004	1,141	1,940	19,572	17.2	10.1
2003	1,117	1,926	18,649	16.7	9.7
2002	1,107	1,914	17,963	16.3	9.4
2001	1,160	2,038	19,627	16.9	9.6
2000	1,142	1,975	18,504	16.2	9.4
1999	1,208	2,025	16,939	14.0	8.4
1998	1,295	2,136	18,129	14.0	8.5
1997	1,521	2,464	17,276	11.4	7.0
1996	1,515	2,506	16,896	11.2	6.7
1995	1,782	2,879	19,037	10.7	6.6
1994	1,999	3,252	21,872	10.9	6.7
1993	2,021	3,350	24,240	12.0	7.2
1992	2,249	3,668	26,405	11.7	7.2
1991	2,329	3,758	27,693	11.9	7.4
1990	2,705	4,336	33,800	12.5	7.8
1989	2,783	4,413	34,966	12.6	7.9
1988	2,966	4,649	37,025	12.5	8.0

TABLE 3
Number of Registered Apiaries and Colonies in Illinois Counties as of July 1, 2012

	# OF # OF			# OF	# <b>OF</b>	
COUNTY	APIARIES	COLONIES	COUNTY	APIARIES	COLONIES	
Adams	35	271	Jefferson	10	115	
Alexander	1	1	Jersey	7	54	
Bond	26	84	JoDaviess	69	1,590	
Boone	20	331	Johnson	11	70	
Brown	15	55	Kane	98	446	
Bureau	39	140	Kankakee	38	352	
Calhoun	4	12	Kendall	36	224	
Carroll	19	325	Knox	23	249	
Cass	13	47	LaSalle	48	260	
Champaign	73	280	Lake	154	902	
Christian	18	41	Lawrence	7	25	
Clark	15	47	Lee	14	54	
Clay	5	36	Livingston	14	30	
Clinton	17	59	Logan	18	261	
Coles	38	167	Macon	35	89	
Cook	192	919	Macoupin	43	178	
Crawford	12	59	Madison	75	285	
Cumberland	16	49	Marion	15	38	
DeKalb	20	84	Marshall	8	61	
DeWitt	12	34	Mason	14	76	
Douglas	16	51	Massac	3	402	
DuPage	126	403	McDonough	17	68	
Edgar	23	93	McHenry	97	739	
Edwards	5	21	McLean	23	134	
Effingham	17	80	Menard	13	70	
Fayette	23	70	Mercer	11	29	
Ford	8	28	Monroe	19	137	
Franklin	11	71	Montgomery	30	96	
Fulton	46	254	Morgan	20	109	
Gallatin	3	23	Moultrie	18	109	
Greene	4	14	Ogle	50	336	
Grundy	16	173	Peoria	51	288	
Hamilton	6	12	Perry	15	196	
Hancock	23	168	Piatt	12	45	
Hardin	1	13	Pike	11	19	
Henderson	10	22	Pope	1	1	
Henry	12	29	Pulaski	3	534	
Iroquois	19	1,554	Putnam	3	26	
Jackson	37	247	Randolph	9	68	
Jasper	29	132	Richland	11	29	

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COUNTY	APIARIES	COLONIES
Rock Island	17	70
Saline	2	2
Sangamon	117	464
Schuyler	8	24
Scott	5	7
Shelby	22	163
St. Clair	77	376
Stark	5	9
Stephenson	31	264
Tazewell	40	323
Union	11	1,510
Vermilion	28	123
Wabash	2	5
Warren	18	115
Washington	18	104
Wayne	33	154
White	4	15
Whiteside	34	214
Will	71	944
Williamson	32	669
Winnebago	41	286
Woodford	31	97
TOTAL	2,849	21,231

TABLE 4

Illinois Apiary Inspection Statistics -- 1990 through June 30, 2012

Year	# of Apiaries Inspected	Colonies in Apiaries Inspected	# of Colonies Opened	Al	FB % of Colonies Opened	# of Colonies with EFB	# of Colonies w/ Chalk Brood	Varr	oa Mites % of Colonies Inspected	# of Colonies Tracheal Mites
FY12	399	2,807	2,031	17	.8	45	5	391	13.9	2
FY11	308	2,135	1,538	1	.1	14	6	265	12.4	2
FY10	406	2,695	1,998	8	.4	35	28	483	17.9	10
FY09	344	4,027	2,947	7	.2	0	5	196	4.9	1
FY08	314	2,073	1,523	12	.8	3	10	113	5.5	1
FY07	343	2,561	1,824	23	1.3	7	24	157	6.1	1
FY06	346	2,673	1,939	36	1.9	2	17	182	6.8	-
FY 05	296	4,695	2,603	50	1.9	10	69	171	3.6	-
FY 04	219	4,696	1,747	37	2.1	1	48	54	1.1	-
FY 03	266	3,662	1,915	89	4.7	8	109	297	8.1	8
FY02	196	1,999	1,254	31	2.5	0	4	141	7.0	-
FY01	231	3,228	1,273	18	1.4	1	41	217	6.7	-
FY00	115	1,731	855	21	2.4	0	4	407	23.5	9
FY99	156	4,083	1,424	8	0.6	0	19	751	18.4	
FY98	199	3,027	1,388	85	6.1	0	51	1,232	40.7	5
FY97	277	2,086	1,236	32	2.6	2	7	99	4.7	-
FY96	279	2,480	1,349	156	11.8	5	54	260	11.3	-
FY95	333	2,584	1,363	15	1.1	3	6	837	32.4	88
FY94	530	3,809	2,357	72	3.1	8	33	1,090	28.6	121
FY93	419	2,366	1,530	48	3.1	6	10	672	28.4	144
FY92	460	-	2,173	62	2.8	19	25	389	-	119
Cal92	474	-	1,916	72	3.7	1	21	618	-	120
Cal91	459	2,944	2,437	64	2.6	3	9	392	-	286
Cal90	400	-	-	140	-	11	108	-	-	-